

REMARKS

Claims 1-25 are pending in this application.

The Examiner rejected claims 1-22 under 35 U.S.C. Section 102(b) as being anticipated by Chee (US Patent No. 5542937). Applicant respectfully traverses the rejection.

The Examiner takes the position that col. 3, ln 62-67 of Chee teaches “a distal tube segment (166) with a second and a differing amount of radiopaque filler lower than the second”. Although it is a little unclear, applicant assumes the Examiner to mean that Chee discloses a distal tube segment having a higher amount of radiopaque filler than that of a proximal tube segment. Applicant respectfully disagrees.

While that section of Chee does disclose the well-known use of a filler in a catheter, it does not teach using different amounts of filler in catheter segments. To the contrary, that section of the Chee reference simply states that “The materials making up the catheter are typically polymeric and may be either neat or filled.” If Chee does not teach varying the amount of filler, it certainly does not teach using a higher amount of filler for the distal tube segment.

The Examiner further stated that the Chee reference teaches “the catheter being formed of several different materials (col. 4, ln 3-17); in which physical parameters of the catheter can be varied along its length along with the amount of radiopaque filler. Applicant respectfully disagrees. The section pointed to by the Examiner teaches varying the amount of only polymer such as LDPE and LLDPE. It does not teach varying the radiopaque filler at all. In fact, all of the disclosed embodiments in Chee show varying only the polymer material, and not the radiopaque filler material.

For example, col. 4, lines 46-49 state that “Particularly desirable is a three part catheter in which the distal section is LDPE; the intermediate section is a blend of LDPE and HDPE; and the proximal section is HDPE” (col. 4, lines 46-49). LDPE and HDPE are all polymer materials, not radiopaque filler materials.

Col. 4, lines 21-23 states that FIGS. 3, 4 and 5 show “the manner in which the polymers are switched during the extension of the catheter shaft” (emphasis added). Col. 4, line 51- col. 5, line 7 discussing FIGS. 6, 7 and 8 also teach varying the polymer only.

In FIGS. 11 and 12, Chee discloses two different extrusion devices for manufacturing a catheter body. FIG. 11 shows a device having three extruders 180-184 that receive different polymer materials. The amount of each polymer being mixed can be varied through respective valves 188-192. FIG. 12 shows a device capable of handling two different polymer materials. In all these figures, only the amount of polymer materials being mixed is varied. Chee neither teaches nor suggests varying the amount of filler materials in different catheter segments.

Even if Chee does suggest varying the filler material, which it does not, Chee still does not teach or suggest having a higher amount of radiopaque filler in the distal tube segment (as recited in claim 1). As persons of ordinary skill in the art and the Chee reference itself appreciate, “the distal end is more flexible than the proximal end” (col. 1, lines 24-25). Since adding more filler reduces flexibility (see paragraph 40 of the present application), it would be counter-intuitive to add more filler to make the distal tube segment more flexible.

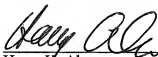
For these reasons, applicant submits that the Chee reference neither teaches nor suggests a distal tube segment having a higher radiopaque filler by weight than that of the proximal tube segment.

For the similar reasons as discussed above, applicant submits that independent claims 10 and 16 are also patentable. Dependent claims 2-9, 11-15 and 17-22 are also patentable by virtue of their dependency from respective independent claims 1, 10 and 16.

The Examiner rejected claims 23-25 under 35 U.S.C. Section 103(a) as being obvious over Chee in view of Ju (US Patent No. 5725513). Ju is cited as teaching a hub on the end of a catheter. As discussed above, neither Chee nor Ju, either individually or in combination, teach a distal tube segment having a higher radiopaque filler by weight than that of the proximal tube segment. Accordingly, applicant respectfully requests withdrawal of rejection for claims 23-25.

Based upon the above amendments and remarks, Applicant respectfully requests reconsideration of this application and its earlier allowance. Should the Examiner feel that a telephone conference with Applicant's attorney would expedite the prosecution of this application, the Examiner is urged to contact him at the number indicated below.

Respectfully submitted,



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